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| Algebra | | | | | | | | | | |
| Nursery | Reception | Early Learning Goal | Year 1 | Year 2 | | Year 3 | | Year 4 | Year 5 | Year 6 |
|  |  |  | Equations | | | | |  |  |  |
| Experiment with their own symbols and marks as well as numerals Solve real world mathematical problems with numbers up to 5 Talk about and identifies the patterns around them. Eg stripes on clothes, designs on rugs and wallpaper (use informal language) Extend and create ABAB patterns Notice and correct an error in a repeating pattern.  Begin to describe a sequence of events , real or fictional, using words such as “first” “then” | Continue, copy and create repeating patterns Automatically recall number bonds for numbers 0 -10 Explore the composition of numbers to 10  Identifying missing numbers from number lines up to 10 | Have a deep understanding of numbers to 10, including the composition of each number Automatically recall number bonds to 5 and some number bonds to 10 including double facts.  Explore and represent patterns within numbers to 10, including evens and odds, double facts and how quantities can be distributed equally | solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = \* - 9 (Addition and Subtraction NC Objective)  represent and use number bonds and related subtraction facts within 20 (Addition and Subtraction NC Objective) | recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. (Addition and Subtraction NC Objective)  recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 (Addition and Subtraction NC Objective) | | solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (Addition and Subtraction NC Objective)  solve problems, including missing number problems, involving multiplication and division, including integer scaling (Multiplication & Division NC Objective) | |  | use the properties of rectangles to deduce related facts and find missing lengths and angles (Geometry: Properties of Shapes NC Objective) | express missing number problems algebraically  find pairs of numbers that satisfy number sentences involving two unknowns  enumerate all possibilities of combinations of two variables |
| Formulae | | | | | | | | | | |
|  |  |  |  |  | |  | | Perimeter can be expressed algebraically as 2(a + b) where a and b are the dimensions in the same unit. (Link to Measurement NC Objective) |  | use simple formulae  recognise when it is possible to use formulae for area and volume of shapes (Measurement NC Objective) |
| Sequences | | | | | | | | | | |
|  |  |  | sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening (Measurement NC Objective) | compare and sequence intervals of time (Measurement NC Objective)  order and arrange combinations of mathematical objects in patterns (Geometry: position and direction NC Objective) | |  | |  |  | generate and describe linear number sequences |
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